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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,032	05/22/2000	ALFRED HAUENSTEIN	POO.0579	3783
29177	7590	12/22/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			ARMSTRONG, ANGELA A	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/555,032

Applicant(s)

HAUENSTEIN, ALFRED

Examiner

Vijay B. Chawan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta et al., (4,401,851) in view of Matsumoto (5,848,390).

As per claim 1, Nitta et al., teach the method for voice recognition, in which spoken language is recognized using a voice recognition system, comprising the steps of:

running the voice recognition system on the computer (Col.1, lines 44-48).

Nitta et al., while teaching running voice recognition system on a computer, do not specifically teach determining a performance index of the computer by a program for computer program assessment, automatically specifying an input quantity for the voice recognition system using the performance index, and, automatically adjusting accuracy of the voice recognition system to an obtained computing power of the computer using the input quantity. Matsumoto does teach determining a performance index of the computer by a program for computer

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program assessment, automatically specifying an input quantity for the voice recognition system using the performance index, and, automatically adjusting accuracy of the voice recognition system to an obtained computing power of the computer using the input quantity (Col.6, lines 49-54, 61-67, Col.7, lines 1-8, 15-20, Col.8, lines 16-21, Col.2, lines 19-28: Matsumoto changes the CPU performance based on the sampling frequency of the input data in a speech synthesis system). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to apply the technique of Matsumoto in the method of Nitta et al., because an artisan with ordinary skill in the art at the time of invention would readily realize that this would greatly increase the accuracy of the system performance.

As per claim 2, Nitta et al., in view of Matsumoto teaches the method of claim 1, further comprising the step of determining values for system parameters of the voice recognition system in that the values are computed from an input quantity in accordance with a mapping specification (Matsumoto teaches mapping to link different running times of the computer to the to the various sampling frequencies of number of quantization bits). Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to apply the technique of Matsumoto in the method of Nitta et al., because an artisan with ordinary skill in the art at the time of invention would readily realize that this would greatly increase the accuracy of the system performance.

As per claim 3, Nitta et al., in view of Matsumoto teaches the method of claim 2, further comprising the step of converting the mapping specification using a table (Matsumoto: Col.7, lines 15-20, Col.8, lines 16-21).

As per claim 4, Nitta et al., in view of Matsumoto teaches the method of claim 1, further comprising the step of executing a setting process during operation of the voice recognition system (Matsumoto: Col.3, lines 37-39).

As per claim 5, Nitta et al., in view of Matsumoto teaches the method of claim 1, wherein the accuracy adjusting step of the voice recognition system includes adjustment by at least one of the following system parameters - pruning threshold, histogram pruning, acoustic look ahead, language model look ahead, threshold for selecting distance parameters that are to be computed (Matsumoto: Col.6, lines 49-54, 61-67, Col.7, lines 1-8, 15-20, Col.8, lines 16-21, Col.2, lines 19-28: Matsumoto adjusts the CPU performance and accuracy based on the sampling frequency of the input data in a speech synthesis system).

As per claim 6, Nitta et al., in view of Matsumoto teaches the method of claim 5, further comprising the step of specifying at least one of the system parameters using the input quantity (Matsumoto: Col.5, lines 1-10, 44-65).

As per claim 7, Nitta et al., in view of Matsumoto teaches the method of claim 6, further comprising the step of weighing the system parameters with respect to their influence on a respective target quantity (Matsumoto: Col.5, lines 1-10, 44-65).

As per claim 8, Nitta et al., in view of Matsumoto teaches the method of claim 7, wherein the target quantity is at least one of the following quantities – accuracy of the voice recognition system, and, speed of the voice recognition system (Matsumoto: Col.5, lines 1-10, 44-65).

As per claim 9, Nitta et al., in view of Matsumoto teaches the method of claim 7, further comprising the step of weighting the system parameters equally (Matsumoto: Col.5, lines 1-35).

As per claim 10, Nitta et al., in view of Matsumoto teaches the method claim 7, further comprising the step of weighting the system parameters according to a prescribed weighting table (Matsumoto: Col.5, lines 1-35).

Claim 12 is an apparatus claim implementing the method of claim 1, and is similar in scope and content and is rejected under similar rationale.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-10, and 12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is

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(703) 305-3836. The examiner can normally be reached on Monday Through Thursday 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vijay B. Chawan  
Primary Examiner  
Art Unit 2654

vbc

**VIJAY CHAWAN**  
**PRIMARY EXAMINER**